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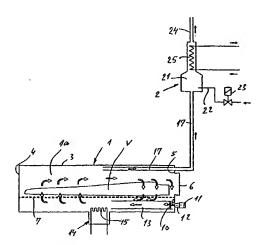
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(54) Title: METHOD FOR RECYCLING COMPOSITE MATERIALS



(57) Abstract: The invention relates to a method for recovering the glass fibres from composite materials in connection with recycling. This is of particular importance in connection with recycling of glass fibre blades from wind turbines and other fibre reinforced composite materials of the type where glass fibre is embedded in a matrix of polyester, epoxy or a similar polymeric substance or a thermoplastic material. The method of the invention consists in a thermal process in which the material is pyrolysed at a relatively low temperature in a closed furnace chamber with an inactive atmosphere, for example in the form of nitrogen. The temperature and combustion conditions are chosen such that the matrix is glasified while the glass fibres remain intact, thus making recycling possible. The by-product of the pyrolysis is combustible gas, which is carried off from the furnace. The energy in the gas may be utilised for a number of objects, such as: propellant for gas engines in combined heat and power plants or storage for later use. Alternatively, the gas may be burned with a minimum of environmentally damaging wastes, if combustion takes place in the temperature range of 1000-1200 °C.



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